

OCT 21 1948

the MANAGEMENT REVIEW

OCTOBER, 1948

AMONG THE FEATURES

Our Changing Industrial Map
The Vocabulary of Free Enterprise
Problems of Remobilization
Your Office Equipment Program
Developing a Testing Program
Industrial Films
Machine Tools and National Security
Population Trends
The Basing Point Ruling
What Makes the Boss Work?
Don't Bet Against Accidents

- PERSONNEL
- PRODUCTION
- OFFICE MANAGEMENT
- MARKETING
- FINANCE
- INSURANCE
- PACKAGING
- BOOKS OF THE MONTH

AMERICAN MANAGEMENT ASSOCIATION

The Office Is a Factory...

AMA OFFICE MANAGEMENT CONFERENCE HOTEL PENNSYLVANIA, NEW YORK • OCT. 26-27, 1948

The office is a factory. Its director has the same problems—production, people, materials, costs. Its efficient operation demands the application of the same dynamic principles of scientific management as are required in factory administration. Its ultimate objective is to *produce*, to contribute to over-all company success.

The AMA found this kind of thinking dominant in its recent survey made in preparation for this Office Management Conference. Office managers (and this is particularly noticeable in AMA surveys made in the past two years) are thinking in larger terms concerning their approach to their responsibilities. This new way of thinking will be brought out in definite form in the sessions of the October Conference. At least three sessions will be based upon the experience of companies that have deliberately adopted this particular policy.

The entire Conference will show how the infusion of a dynamic philosophy into office operations, and particularly office *planning*, can establish new records of achievement in cost reduction and over-all efficiency.

To keep informed and to be abreast of these trends, be sure to attend this Conference.

To non-members who read this announcement, AMA regrets to say that the conference will be restricted to members of the Association.

Some of the Highlights:

RESEARCH APPROACH TO
MANAGEMENT PLANNING
TOP MANAGEMENT AND OFFICE
COST CONTROL
DEVELOPING AND USING THE
OFFICE MANAGEMENT AUDIT
CONTROLLING OFFICE
ACTIVITY COSTS
DETERMINING OPTIMUM STAFF
REQUIREMENTS

KEEPING UP TO DATE ON
SALARY LEVELS
APPRAISING THE OFFICE
SUPERVISOR
IMPROVING OFFICE SUPERVISION
WORK SIMPLIFICATION AT THE
EMPLOYEE LEVEL
AN OFFICE MANAGEMENT
"IDEA WORKSHOP"

AMERICAN MANAGEMENT ASSOCIATION
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the MANAGEMENT REVIEW

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General Management

America's Changing Industrial Map

AMERICAN industry is moving across the continent. The rate of industrial migration since 1939 is faster than ever before and hasn't slackened yet. World War II was the supercharger. Then the postwar expansion program gave migration another boost. At present, postwar construction is shattering the wartime record in both the South and the West. Half of all new plant construction is in those regions, which boasted little more than a fourth of all prewar plants.

Ever since colonial times industry has been on the move, and always from the North and East to the South and West. New England was preeminent through the early 1800's. Later the Middle Atlantic states began to grow. Then it wasn't long before the Great Lakes states were nudging both regions.

During World War II the New England, Middle Atlantic and Great Lakes regions, which had 72 per cent of all manufacturing jobs before the war, got only 55 per cent of the new wartime plants, and are getting only 45 per cent of the new postwar plants. During the past dozen years the nation will have boosted its factory capacity by 50 per cent. But the increase for the South and West will be almost 100 per cent; while the Northeast regions have gained only about one-third. In other words, putting one-half of the U.S.'s over-all 50 per cent expansion of industry into the South and West has made those "new" regions grow almost three times as fast as the old ones.

Two yardsticks measure industrial migration—one, the money spent for new plant and the other, employment. Between 1939 and 1945 almost \$10 billion were spent for plant construction, while since the war only about half that amount has been invested. But many wartime plants cannot be converted to civilian use and postwar expansion still has at least a year to run. It is probable, then, that final figures will show almost as much permanent new capacity as wartime building.

Using the employment yardstick you find that the Northeast lost 3 per cent of its share of total factory jobs from 1939 to 1947 and the South and West gained that much. This change in employment reflects only the wartime shift because few new plants begun after V-J Day could have been completed and fully operating by the start of 1947. On that basis the shift during the war years checks with estimates based on construction figures, which show a shift of 6 to 7 per cent for the complete war and postwar migration.

These job figures show that great as is the volume of new construction and rate of growth in the South and West, migration is a slow process. A dozen years will raise the share of jobs in factories for these regions from 28 to about 35 per cent of the total. The regional gains and losses, as shown by the following breakdown, are more striking:

New England. The region's share of factory jobs has shrunk consistently, and since 1939 suffered the

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sharpest loss of any region. Even the postwar industrial job total stands lower than in 1919. Nondurables have taken the worst recent declines, while totals increased for three out of six metalworking industries. Durables are winning out in this traditionally soft-goods region, accounting for three-quarters of the over-all job gain since 1939. A long-rumored move to build new seaboard steel mills in the region would hasten this trend.

Middle Atlantic. Since 1939 this top-ranking area suffered the second worst regional loss. Since only 20 per cent of total U. S. new plants have gone to this region, in contrast to its 30 per cent share of existing employment, further cuts in its over-all share of industry are in prospect — even though its total industry continues to grow.

Great Lakes. This region, the heart of the nation's prewar industrial growth, is slipping. Shares dropped in 14 out of 20 industries, and the proportion of new plant runs below its present proportional slice of total manufacturing. The trend away from this region has been slight but general. From now on, losses will begin to appear in heavy goods industries in which the region boasts special concentration.

Southeast. Forging ahead slowly but steadily in most lines over the years, this region has specialties like textiles and lumber in which it scored its biggest gains since 1939. It moved up well but less sharply in food, paper, rubber, etc. Its striking advances in income per capita may speed up Southern migration among other manufacturers of consumer products, but the allotment of new construction thus far suggests growth at its historically moderate pace.

Farm West. The region has taken a new lease on industrial life during and since the war. Since prewar, its

shares of U. S. jobs have advanced in 18 of 20 manufacturing lines. Whereas food industries comprised one-third of prewar factory jobs, they provided only one-sixth of 1939-47 job gains. Postwar construction indicates a continued mild but general industrial advance.

Southwest. This is America's fast-growing industrial infant. Prewar Big Three industries were lumber, food, and oil. But the region has diversified by advancing in almost every industry group and is running triple the nation's average pace in plant expansion.

Far West. While starting from a bigger industrial base, gains are running almost as sharp as in the Southwest. Postwar construction is running even faster than wartime building. Where food and lumber made up almost half of 1939 factory jobs, they are now a fifth of 1939-47 expansion. Metals and chemicals have almost trebled their jobs, now balancing food and lumber. Other manufacturing has also made strides. The lumber industry was the only one on which this region showed a decline.

Although there has been a nationwide industrial trend to smaller cities, the move from big cities to small is not so great as are the shifts among regions. Big cities have gained 45 per cent since 1939 in the number of factory jobs, while the rest of the country was gaining 50 per cent. These "big cities" are the 20 top industrial urban centers of the nation. Their share of the total U. S. factory employment, almost one-half before the war, has slipped by only 1 per cent.

Migration today is no single-industry or one-region affair as in the past. In 19 of the 20 industries analyzed by the BLS, the South and West increased their shares during the war years, with the Southeast, Southwest,

Farm West and Far West gaining in 15 to 18 of the 20 industries. In contrast to this, each of the northeastern regions lost in almost all lines.

There are a host of reasons for deciding where to locate a plant. The Department of Commerce, for example, lists 13 basic industrial location factors, ranging from natural resources through cost differentials and markets to government policies and industry practices. Near the top is government action, such as the TVA and the location of government defense plants in new centers. The cut in freight rate differentials gave the South and West new incentives. Also the Supreme Court's decision on the basing-point system in setting prices will stir up more industry movement. But that will not contradict the trend to South and West; rather the reverse may hold. First, much of any movement will take place within the three northeastern sections—examples may be from Indianapolis to Hammond, Ind.; or Toledo to Pittsburgh. Second, in some moves the higher freight costs of steel may be just the final reason for relocating—say, from Bridgeport, Conn., to Birmingham. Third, steel mills can move nearer their customers as well as vice versa, so western regions that don't have many steel mills now may gain.

More important, however, is the

change in consumer markets. The South and West have increased their share of income from 38 to 44 per cent since 1939. They also came out of the war with less industrial capacity compared to their consumer markets than they had before the war. This was accounted for both by population growth and a healthy gain in per-capita income.

Migration has a way of feeding on itself. A new auto assembly plant, for example, locating in Atlanta or Los Angeles, may find trained labor now available, with parts suppliers growing up in the area and freight rates changing favorably. Once built, such new plants attract new makers of parts and supplies, thus enlarging the total market for basic raw materials as well as the whole range of industrial equipment. The circle expands again when the new industrialization attracts new workers, increasing area population and incomes.

In the years ahead, a new emphasis may be given migration and decentralization as the U. S. prepares against the possibility of atomic warfare. But even without that incentive it is easy to predict that the new, more general migration feeding on itself will forge ahead for some years to come. Industry is marching with a new momentum.

Business Week, August 7, 1948, p. 65:8.

Do We Face a New Kind of Business Cycle?

WHAT has happened to the business cycle? For more than nine years—ever since the turning point of mid-1938—the American economy has been in a state of boom. By every historical precedent we

should have experienced a substantial recession somewhere along the line, for the historical index of our national production shows an irregular succession of peaks and valleys, with roughly 10 years between each peak.

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And yet, except for the period of adjustment immediately following the war (when government spending dropped from \$83 to \$31 billion overnight), the past decade has been one of continuous growth. Consumer expenditures, for example, have grown from \$64 billion in 1938 to over \$170 billion 10 years later. Could this period of sustained development, the longest in our history, mean that the cycle is a thing of the past?

For cycle-minded management men and investors, the problem is more than just an academic one. If they had judged only by history and charts of prices, they would have done wisely to have shortened sail several years ago. And yet the "inevitable" recession never materialized; had business executives set their course by history alone, they would have missed one of the greatest eras of American prosperity. What management wants to know is this: Are we still operating in the pre-war cycle or have we entered a new economic climate, one with different business cycles or even without cycles at all?

Most economists would agree today that the regular cycles we used to experience are to some extent a thing of the past. But they would also hasten to add that our economy is just as vulnerable to economic ups and downs. What they mean is that the *automatic* forces which once set the pace of business have lost their importance, to be partly replaced by *controlled* economic levers for inflation and deflation.

Today we operate in an economy which is increasingly controlled by government decision, an economy in which freedom of economic behavior has been considerably diminished. To cite only a few examples, wage rates are no longer freely responsive to the supply and demand for labor; they are

set by union action. Business prices and activities are partly determined by laws and regulatory bodies. And most important of all, consumer demand is bolstered by government activity which can open the faucet of additional spending whenever the economic situation demands.

What does this mean for management? Primarily it means that the automatic economic bellwethers of the past are no longer entirely reliable. It is no longer safe to predict the future in the light of the past. One can only predict the future by evaluating each of the three great streams of demand—government spending, business investment, and consumer demand.

Today government expenditure is again on the rise. It seems probable that the budget for the next few years will be well over \$30 billion per year, a sum almost equal to our total national income in the depression years.

Consumer expenditures, currently running at record heights, will be sustained by recent third-round wage increases and by consumer credit which is also on the upswing, now nearly \$14 billion.

And business investment, running at just under \$20 billion a year, seems strong for the balance of 1948 at least.

It is on such specific indicators that management must base its own forecast for the future. The feeling that a bust is "due" because a boom has run a certain number of years is no longer the valid economic reasoning it once was. Fundamentally new and different factors of economic "stickiness" and economic control have been injected into the situation.

But this by no means implies that we are forever on a plateau of full employment and maximum output. Instead it means two things: greater stability if private demand should dry

up, but potentially greater instability if government demand should fall off.

Thus, if business expansion of plant and equipment should grind to a halt during the last quarter of this year, we can avoid the heavy fall in general purchasing power that such an event would have meant in the days when private investment was the prime mover in the cycle. Today we could expect the government to inaugurate a public works program which to some extent would take up the slack left by the curtailment of private activity. Similarly, if business and private spending soar to unexpected heights the government, by curtailing its own economic activities, can dampen the inflationary surge.

On the other hand, the danger remains that if the government should suddenly reverse its economic policies, the whole business structure would feel the impact keenly. For in addition to government payrolls much private activity is carried on in the expectation that government-generated demand will continue unabated.

Management therefore must keep a careful eye on the government bud-

get, for it, more than any other single factor, sets the economic tone of the nation.

Does this reduce economic forecasting to a game of politics-guessing? To an extent it does exactly that. The future course of our relations with Russia, the elections and the economy-mindedness of the Republican and Democratic parties, E.R.P., and many other government actions have vastly more than political meaning today—they are the basic economic indicators of the future.

The old-fashioned business cycle, dependent on a freely operating economy, is largely gone. In its place we have an economy partly free, partly controlled. Though many business men regard the government's encroachment on the economic world with a wary eye, the fact remains that this can be the greatest force for stability the capitalistic system has ever known. And its mismanagement can undoubtedly cause more havoc than all the instability that private capitalism ever produced.

By ROBERT L. HEILBRONER. *American Business*, July, 1948, p. 16:3.

Industrial Self-Criticism Project

GENERAL MILLS, INC., is pioneering an experiment in industrial self-criticism. Six professors from Harvard University's Graduate School of Business Administration are spending 11 weeks this summer surveying and studying the company's organization and operations. The company is financing the project.

The committee of experts has absolute freedom. They may study whatever operations and records or interview whatever personnel they think advisable. The one condition is that they write a report before August 13th giving the board of directors "an outside point of view."

The professors spent several days working as a unit to gain an over-all picture of company operations. Then they separated, each member following his own specialty in advertising and marketing, production, accounting and control, personnel and labor relations, procurement or top management. Their itinerary calls for interviewing and observing at a number of the firm's plants and branch offices as well as the Minneapolis headquarters.

The company offered the professors no specific problem to tackle, but merely opened its doors and told the committee to take a look. While the primary objective of the survey is the final report, the professors may use the data they gather as part of their course work at Harvard.

—The Minneapolis Morning Tribune 7/15/48

The Vocabulary of Free Enterprise

PROBLEM Number One of public relations today is that of better understanding between management and labor—and, in a wider sense, between business and the general public. For years, research has been piling up evidence that the American public doesn't understand the business man's language. Ask anyone what is *depreciation* or what is *capital gain* and see what happens. More important, ask anyone the meaning of *free enterprise*. Not long ago the Gallup Poll did just that and found that seven out of 10 Americans can't properly define the phrase; most of them think it means something invidious, such as "freedom to take advantage of labor" or "freedom to exploit people who know less than you do."

How does a man make himself understood? The answer is easy. Anyone who has ever explained a difficult word to a child or a foreigner knows how it is done. You use a familiar equivalent for the unfamiliar word or phrase, or, if there isn't any way of translating it, you show how it is used in a familiar situation. This psychological mechanism fits any kind of explanation, but when large abstractions are to be explained to a wide audience, it's often hard to tell which words, meanings, or situations will be more familiar than others.

Fortunately, research has produced an instrument by which relative familiarity of words and meanings can be estimated—the *Thorndike Century Senior Dictionary*, in which a simple numbering system shows the frequency of use for most words and meanings. Since this frequency is a rough measure of familiarity—particularly for meanings—the dictionary is a useful tool for anyone faced with a job of explanation.

For example, let's look up the word *depreciation*. The number listed—11—tell us that Professor Thorndike counted more than 10,000 words that are used more often. No wonder the ordinary person doesn't understand what the word *depreciation* means.

What about *free enterprise*? Four meanings of *enterprise* are listed, in the order of their commonness: "(1) Important, difficult, or dangerous undertaking. (2) An undertaking, project; as, a business enterprise. (3) Readiness to start projects; courage and energy in starting projects. (4) Carrying on enterprises; taking part in enterprise. We contrast private enterprise with government control, n. 5." In other words, *enterprise* is among the 5,000 most common words of our language, but its meaning in the phrase *free enterprise* is rare, being last in the order of commonness. The average person will think of three different meanings first.

Another key word to explain business is *profit*. According to Thorndike it's among our most common 2,000 words. Yet a number of concerns, including a well-known economic foundation, omit the word *profit* from their annual reports to "explode the profit myth" and "exorcise Karl Marx." But does it?

Similarly, in the U. S. Chamber of Commerce "American Opportunity" program the phrase *profit motive* is avoided and "profit, wage and salary incentives" is used instead. According to Thorndike, *incentive* is simply a less common equivalent for motive, and the effect of the substitution is probably nothing but annoyance.

"Putting it in familiar terms" is not so simple as it may seem, either. The transformation of large figures into amounts of manageable size works, for

instance, so long as natural standards are used—like the sales dollar or the price of a typical product. But some public relations men prefer trick devices and apply yardsticks that fly in the face of common sense.

Take one company's annual report that showed profits and losses "per worker per week." This is like giving baseball scores "per spectator per minute." Or, take the attempt to make use of a word everybody knows. Offhand it may seem a good idea to put a word with favorable connotations to a novel use. But since the commonest words have the most deep-rooted associations, they resist transplantation most. People resent interference with their natural mental habits.

To call *profits* "cost of using tools" therefore seems psychologically unsound. *Tool* is among the most common 2,000 English words. It means, ordinarily, "a knife, hammer, saw, shovel, or any instrument used in doing work." Will this pleasant, homely word, used as an equivalent for *capital*, turn the enemies of private enterprise into its friends? Hardly. Even more dubious psychologically is the new title of the rank-and-file members of the U. S. Chamber of Commerce, "American Opportuneers" — which sounds like a blend of opportunist and profiteer.

What, then, is the solution? There is no easy formula, of course. But here are some suggestions: First of

all, try to translate the language of management into the language of the workingman. This is not at all impossible. The increasing number of balance sheets showing "what we own" and "what we owe" or "what we took in" and "what we spent" are encouraging signs.

Second, stop being apologetic. Explaining profits away will never make friends for private capitalism. Wasn't this country built by private enterprise? What put the profit motive under a bushel? Why not come right out and show what it can do? Why not show how it stimulates production, provides jobs, cuts prices, raises the standard of living?

Third, realize that understanding comes from meaningful experience. Management vocabulary can really be learned only by looking over management's shoulder, and maybe even taking part in the management experiences signified by that vocabulary. Profits are readily understandable where a profit-sharing plan is installed; management problems become alive when they can be viewed from the committee room as well as the workbench. And don't forget that any kind of cooperation works both ways. The vocabulary of labor can't be learned by staying put in the front office either.

BY RUDOLF FLESCH. *The Public Relations Journal*, January, 1948, p. 10:4.

Industry-Owned Aircraft Growing in Importance

MORE than 1,000 multi-engine civil aircraft are owned and operated by some 800 private corporations representing a wide variety of businesses in the United States. These planes constitute numerically the largest civil transport fleet on earth, and their increasing number is one of the most encouraging phenomena in current aviation development.

This fleet, which might be called the Executive Fleet, has the nucleus of its organization in the Corporation Aircraft Owners Association. Organized late in

1946 the C. A. O. A. held its first clinic in Washington on Aug. 11. Present were representatives of more than 100 corporations, as well as Civil Aeronautics Administration officials, aircraft industry spokesmen and officers of fixed base operators and training associations.

The planes of the Executive Fleet are now used chiefly to transport top officials, but company sales and promotion departments more and more are needing into use of "the Old Man's" ship. Even this is not so significant as the increasing number of instances in which the planes are used for cargo purposes.

In a general survey of 100 company users of executive planes, 64 per cent said the main purpose was to save time, 30 per cent appreciated the convenience of reaching remote off-line destinations, 22 per cent declared for economy and utility, and a sizable number said the craft gave them prestige.

From a national security angle, the Executive Fleet is worth its weight in gold. If crisis comes, it may serve to tie together the inter-arsenal communications of democracy as could no other force.

It is interesting to note that 76 per cent of the executive plane pilots are drawn from company personnel rather than from professional pilot ranks. How deeply this business of flying has penetrated!

—GILL ROBB WILSON in *New York Herald Tribune* 8/18/48

Are You Man or Beast?

THE Market Research Council of New York asked the secretaries of members to answer some pointed questions about their bosses. Many may find in the answers below a revealing self-portrait.

To the question, "What about his desk—tidy or messy?", replies broke down into the following percentages: tidy, 52; messy, 31; "neat piles of messy papers," 13; very messy, 2; "windswept," 2.

The query "What, would you say, are his greatest virtues?" elicited the following replies, in order of frequency (all percentages): consideration, 34; understanding, 24; intelligence, 20; sense of humor, 18; sincerity, 14; patience, 12; honesty, 8; generosity, 6; his smile, 2; "he's never in office," 2; and 53 other adjectives and/or descriptive phrases mentioned 70 times.

Fifty-eight per cent of the respondents stated that their bosses dictate clearly, 40 per cent said they mumble, and 2 per cent facetiously declared that "A beard might help."

The worst faults of the boss were revealed as: bad memory and absent-mindedness (by 12 per cent of the secretaries); works too hard, 10 per cent; quick temper, 8 per cent; too impersonal, 6 per cent; procrastination, 6 per cent; stingy, 4 per cent; too generous, 4 per cent; impatient, 4 per cent; brunettes, 2 per cent. Thirty-five other adjectives and/or descriptive phrases were mentioned 36 times.

—*Sales Management* 3/15/48

"Freedom Train" Exhibit Available for Industrial Display

FREEDOM TRAIN, dramatic symbol of the American Heritage program to create a new awareness of the essentials of our democracy, has completed the first year of a country-wide tour embracing over 300 cities. The display of 127 original documents of national liberties has been viewed by several million citizens, while millions more have taken part in rededication exercises and celebrations to point up the individual's part in community affairs.

To enable many more millions to view the primary exhibits of the tour, the American Heritage Foundation has available for business offices, retail stores, factory cafeterias, etc., a full-color nine-piece display which includes artistic facsimiles of such significant documents as Jefferson's rough draft of the Declaration of Independence, The Bill of Rights, Lincoln's draft of the Gettysburg Address, as well as Francis Scott Key's copy of the Star Spangled Banner and Revere's commission as an official messenger. The center piece is 24" by 42"; the smallest piece is 10" by 15". All nine pieces have easel backs.

The documents, plus a copy of the Freedom Pledge and the Rights and Duties of Citizenship, also a full color reproduction of the Freedom Train itself, are priced at \$2 per set. Orders can be placed through the American Heritage Foundation, Department 1, 17 East 45th Street, New York 17, N. Y.

Problems of Industrial Remobilization

RENEGOTIATION of defense contracts is "definitely undesirable in peacetime," according to approximately nine out of 10 executives surveyed recently by the Conference Board on problems of industrial remobilization. Only four out of 10 oppose renegotiation of wartime contracts, and the other six tend to qualify their endorsement.

Renegotiation in peacetime is opposed on the ground that it is unnecessary and that "it is impractical to expend great sums to establish a renegotiation staff." Executives are "not in favor of placing so much power" in the hands of an administrator. Many express the idea that renegotiation penalizes the person who cuts down his normal business in order to supply defense material. The law of supply and demand, say some of the executives, will give the government the best price. Peacetime renegotiation might "keep costs high and even provide an incentive to avoid accepting defense work contracts."

The 10 per cent who condone peacetime renegotiation feel that it is necessary to alleviate public resentment toward possible profiteering, and that the device "should be limited to non-competitive products and non-standard products where it is difficult to make accurate cost quotations."

Many of the executives opposing renegotiation during wartime express the same views as those who do not agree to it during peacetime. Generally, they feel that renegotiation is not necessary and that properly established and equitable tax laws should be relied upon instead.

Though about six out of 10 industrialists accept renegotiation in wartime, they do not like it but have rec-

onciled themselves to the necessity of such a practice. The majority agree that it is justified on new projects where there are likely to be high fixed prices evolving out of inability to make accurate cost estimates, and where there are likely to be constant engineering changes. Also, the speed of modern war "necessitates the elimination of certain preliminary operations such as time studies and cost analyses," thus warranting the application of renegotiation.

Acceptance of renegotiation for wartime contracts is frequently qualified by the statement that its operation should allow a fair return after taxes and that procedure should be equitable, well thought out, and rigidly controlled. According to one executive it should be accompanied by "(1) effective and universal control of productive facilities of industry, agriculture, and commerce, including transportation; (2) definite limitation on profits to take all excess profits out of war, for both war and civilian industry; and (3) definite limitation and freezing of wages, salaries, and income of all segments of the population."

Steel allocation and mandatory order powers as embodied in the new Selective Service Act are criticized by a majority of executives participating in the survey as being unnecessary in peacetime. These executives believe industry should take the problem on its own shoulders through voluntary action.

On the other hand, approximately 13 per cent feel such controls would insure accomplishment of the objectives of the present national defense program.

A few of these executives feel controls are necessary "to assure a con-

tinuity of supply of raw materials which small companies may have difficulty in obtaining." Some others think the controls must be used "to lessen bottlenecks and the worsening of shortages."

Slightly more than half the executives indicate they can take on defense work without curtailing regular production for the civilian market. About 10 per cent of these executives say they can handle defense work without any difficulty, since current civilian demand is below capacity levels. However, in many cases, the amount of defense work to be undertaken would depend on one or more factors, most important being an adequate supply of raw materials.

Other executives state that any substantial amount of defense work would bring about bottlenecks of labor, capital, tools, and plant space. Labor is indicated as being the most serious bottleneck.

Slightly fewer than half the executives assert that it would be difficult to accept defense work without seriously curtailing civilian production. A few point out that a scrap shortage makes it difficult to accept defense work, while others indicate that civilian production is still insufficient to meet the present need. Still others "could not do defense work since it would require complete conversion, which would result in severe disruption of civilian production."

Office Management

Planning Your Office Equipment Program

AN office equipment program involves much more than the mere procurement of office machines. A well-planned equipment program shares with the other management programs the responsibility for accomplishing the basic administrative objectives of the organization. These include: improvement of products or customer service; reduction in operating costs; simplification of work methods; and the compilation of essential data for management on operations throughout the organization.

In order to plan and carry out a successful equipment program, a comprehensive knowledge of the organization and all major operations, as well as skill in applying accepted manage-

ment techniques, is basic. A well-integrated planning program places equipment planning in the staff circle with the other management planning programs, for there is a close relationship between equipment planning and organization planning, methods and procedures improvement, work simplification, employee suggestions, administrative reporting, forms and correspondence improvement, and administrative audits.

The program may be divided into (1) special non-recurring equipment and other studies: (2) the continuous program.

Several major steps are necessary to round out the special equipment study. Step 1 is a determination of objec-

tives of the study. Step 2 is a gathering of the facts. Only pertinent information should be collected. This may include: a study of organization or functional charts; an analysis of each step in the work flow; a study of the forms, records and files; an analysis of current and projected workloads. In addition, suggestions should be solicited from the operating personnel.

Step 3 is an analysis of the information collected. Are similar operations performed in more than one place? Do responsibilities overlap? What steps in the work flow might be eliminated? The information collected should be discussed freely with key operating personnel as a check on its accuracy and completeness.

Step 4 is the development of new procedures. The following should be considered: Would centralization of similar operations create sufficient volume to justify mechanization? Will mechanization expedite the work, permit more effective utilization of personnel? Will work flows be constant or fluctuating? Should controlled backlogs be established to create and regulate volume for a constant flow of work through centralized points? What adjustments in the work flow in other sections will this scheduling require? Is the plan consistent with the objectives of the organization as a whole?

Step 5 is the selection of the equipment. Here the following check list may be used effectively:

1. *Basic machine considerations:* Does the machine meet all requirements? Will quality of finished product meet standard? Is the machine process simple or complex? What is the number and sequence of steps?

2. *Production planning:* What is normal machine capacity for an 8-hour day? Will the projected workload exceed its limitations in six months? A year? Five

years? What production controls must be established, if any?

3. *Cost factors:* What is the original cost? The annual cost? Annual cost of service and maintenance? Continuing cost of supplies? Does the machine increase personnel costs?

4. *Personnel considerations:* Will employee morale be affected by the new procedure? What degree of skill is involved? What difficulties in training and supervising personnel?

5. *Layout and installation problems:* Is additional space or considerable rearrangement involved? Any additional lighting or noise conditioning? Special electrical wiring or plumbing?

6. *Relationship to other procedures:* Does the new equipment have features not needed for the work? If so, will they be used in other work? What other uses are possible? Are changes in forms and/or records required? Will new filing equipment be needed?

7. *Effect on future plans:* Can the equipment meet new and changing procedural requirements without factory conversion? Should consideration be given to rental rather than purchase? What provisions are available for expanding production?

Step 6 is installation of the new system. The equipment must be installed properly and used correctly by the operating personnel. Has all personnel affected been advised of the changes involved and the reasons for them? Have training material and schedules been developed? Have arrangements been made to effect last-minute changes which may be necessary? Have detailed instructions been written up to cover the new procedure?

Step 7 is the follow-up. Results of a new installation should be analyzed carefully for a reasonable period to correct deficiencies and to take advantage of further improvements which may be possible after the equipment is in use. Management should be kept advised by reports of progress and production under the new system. When these reports indicate weaknesses, prompt remedial action should be taken. Where production fluctuates,

the underlying causes must be sought out, and where a fluctuation pattern is found to be unavoidable, it may be possible to predict with sufficient accuracy to permit use of idle machine time for other work.

The continuing program consists of three principal functions:

1. *Conducting the research.* Well-managed organizations are interested in new machines even before they reach the market. It may be desirable at times to delay a change in procedure for the release of a new machine. Management should keep abreast of new developments to determine not only the proper product but the proper time to procure through: (a) direct contact with equipment manufacturers; (b) study of technical publications; (c) membership in professional societies; (d) attendance at business shows; and (e) continuing analysis of equipment operations and problems in the organization itself.

2. *Establishing the standards.* Frequently several products will serve the operation equally well. But sometimes only one particular make or model will satisfy all requirements and occasionally equipment must be specially designed to meet the requirements of a particular operation. The requirements established as standards must be high but realistic, in four general areas: (a) physical standards; (b) production standards; (c) personnel standards; and (d) service and maintenance standards.

3. *Analysis and control of purchases.* All requests for new or additional equipment should have the approval

of the methods staff, if any, before procurement. In any event, five steps control the purchase of equipment:

a. *Preparation of equipment request:* This should include a description of the operation to be performed, the monthly workload, anticipated workload increase or decrease, size of forms used, number of carbons prepared, number of like machines now in use, number of hours per day in use, etc.

b. *Analysis of request against standard:* The screening of such requests against tables of allowances or standards for corresponding operations will readily indicate those areas which are under-equipped.

c. *Study of non-standard request:* Where requirements appear to be in excess of the standards established and show no justifying workload, further analysis is necessary. Failure to follow simplified procedures, difficulties not anticipated in the original study, laxity in personnel or machine production, introduction of unnecessary steps or controls in the machine method may all contribute to unwarranted demands for equipment.

d. *Initiation of special studies:* A request for non-standard equipment may indicate need for procedural change. It may also turn up new ideas of operating personnel for improvements applicable throughout the organization.

e. *Changing of standards and procedures:* As a result of special studies or analysis made in response to such requests, standards and procedures are frequently amended or supplemented.

The success of the program will depend largely on the attitude and support of management, position of the program in the organization, the extent to which it is integrated with related management planning programs, and the abilities of the individuals responsible for its planning and execution.

By A. P. LOEBER. *Modern Management*, August, 1948, p. 19:5.

AMA OFFICE MANAGEMENT CONFERENCE

A Conference of the Office Management Division of the American Management Association will be held on Tuesday and Wednesday, October 26 and 27, at the Hotel Pennsylvania, New York City.

Personnel

In-Plant Feeding Holds Gains

THERE is one labor matter on which industrial workers and bosses definitely see eye to eye: in-plant feeding. A survey, reported recently in the *Harvard Business Review*, shows that this field is now "remarkably free from serious controversy." Both sides recognize industrial feeding as an important condition of employment.

During the war, in-plant feeding had its greatest growth. By 1944, eight out of 10 factories employing 1,000 or more workers had food-service facilities.

Unions now look on in-plant feeding as a "working condition" which management should keep going; 64 per cent of the labor group surveyed said that "industry in general will be expected to provide feeding facilities for its workers in the future."

Management sees many advantages in factory-feeding—it's a timesaver, cuts absenteeism, helps boost factory output in other ways. A large majority (83 per cent) of the bosses polled agreed that "in-plant feeding as an industrial development is here to stay."

Both unions and management placed plant cafeterias in second place among activities—not connected with wages and hours—useful in promoting better employee morale. Top spot on the union list: management encouragement of unions. First on management's list: promotion of sports.

Both union members and management are convinced that company cafeterias should be the responsibility of the company.

Food should be priced so that the cafeterias can be operated at actual cost. Workers surveyed did not favor a company-subsidized cafeteria, even if it would mean low-cost food. Reason: It might wind up as a company bargaining point.

An unusually large volume of comment came from another question: Should workers and management mix at meals? Both said it would be a good thing once in a while.

The survey found a trend away from company-operated cafeterias. Management now leans toward letting someone run the restaurant "who knows his business as we know ours." But most companies shy from the once prevalent practice of giving cafeteria concessions to outsiders. Management found that it still got blamed for food, price, and service abuses by concessionaires; hence it wants to keep some say-so about cafeteria operation.

So the trend now is toward professionally managed plant restaurants supervised by the factory personnel manager. The contractor gets a guaranteed fee, based on a stipulated per-employee cost of service. Any operating loss is underwritten by management—which can decide whether the contractor should make income and costs meet by serving beans as the main dish on a 45-cent meal, or whether beef should be served, with the employer making up the deficit.

Business Week, June 19, 1948, p. 110:2.

Developing a Testing Program

THE basic steps in developing a program of psychological testing for personnel selection are so obvious they are rarely given the attention they merit. Thus a careful look at some of their implications will amply repay anyone considering using psychological testing for selection purposes. Following are the essential steps:

1. Description and analysis of the jobs to be performed.

Here a word of caution is in order. While a job evaluation program may facilitate this first step, there is no substitute for direct observation of what the worker actually does. Such observation is needed if for no other reason than to check up on the job descriptions already formulated.

The most comprehensive job descriptions available are those prepared by the Job Analysis and Information Section of the USES.¹ These descriptions, though prepared primarily for public employment offices and hence describing the jobs in a generalized way, are often useful starting points. For the higher type of position, the United States Civil Service Commission and various state civil service boards have probably done more than most companies in drawing up job descriptions and attempting job evaluations.²

2. Identification of abilities, traits, or qualities needed for successful job performance.

It is necessary to identify successful and unsuccessful workers in the job in question and to seek to learn why they succeeded or failed. Where deci-

sions regarding a worker's success cannot be made on the basis of output but must be based rather on such a subjective factor as a supervisor's judgment, there are numerous ways to minimize the influence of bias. Pooled judgments of two or more observers, preferably of divergent backgrounds, personalities, and interests, provided they have the necessary understanding of the job and its relationship to other activities of the firm, will often serve to cancel out individual prejudices. Moreover, observers may be trained to make their judgments as objective as possible and to agree on types of evidence to be used in arriving at judgments. Judgments in terms of specific qualities (he learns quickly, etc.) are more revealing than judgments in general terms (superior, good, average, etc.).

Many testing programs are developed mainly on the basis of characteristics observed in successful workers. While selection on this basis will reduce the hiring of individuals likely to do poorly, it can lead to a lot of waste motion and sometimes to the rejection of individuals with good prospects for job success because it is not always possible to tell whether the particular qualities and abilities found in successful workers are responsible for their success on the job or are the result of successful job experience itself. Moreover, the fact that the majority of successful workers in a particular job possess a certain trait or ability does not necessarily mean that trait or ability is needed for successful performance on that job or will contribute much to it.

A specific example may illustrate the kind of error sometimes made. One organization recently embarked

¹ See *Occupational Analysis Publications*, a listing of the publications of the Division of Occupational Analysis, U. S. Employment Service, U. S. Department of Labor.

² Ismar Baruch, *Position Classification in the Public Service* (Chicago, Civil Service Assembly, 1941).

on an aptitude and achievement testing program for accountants. The Strong Vocational Interest Inventory is one of the tests in the program. In the use of this test in this particular case, the individual is scored not only on his interest in accounting, which is obviously appropriate, but also on his interest in each of 24 other types of occupation ranging from company president to minister. These scores are recorded on a chart, where the position of an "X" marks the degree of interest in each of the occupations in relation to a heavy black line representing the median scores for the interests of a group of 1,000 accountants already in the profession. The error lies in going beyond the interest in accounting and attaching importance to other interests which have not been proved to be related to success in accounting. This certainly comes close to the line of reasoning that "whatever is, is right"—that the jobs and occupations the 1,000 accountants liked best and least are those that any prospective accountant *should* like best and least.

3. *Development of tests for determining the extent to which needed qualities are present in job applicants.*

In general, the tests available for measuring such aptitudes and abilities as number facility, finger dexterity, and ability to visualize spatial relationships and for measuring the degree of interest in different types of jobs and occupations are better than those available for use in connection with personal qualities such as leadership, ability to get along with others, imagination, and loyalty. Devising suitable testing situations and analysis of test items in constructing tests to get at certain abilities and traits require special technical training and wide experience in such work if good results

are to be obtained. Thus much will depend on the competence of those in charge of the program.

4. *Administration of tests, including the important task of accurately interpreting test results.*

Although by its very nature the interpretation of psychological tests has to be done on an individual basis, there is one phase, namely, interpreting the interrelationships and significance of the pattern of the test scores, that can be carried out on the basis of an examination of the test records alone. The task of assessing the individual's test performance in the light of all possible sources of error, searching for explanations of any inconsistencies noted, evaluating the influence of his background and basic attitudes, and so on, can be done only by discussing the test results with the individual concerned. This phase of the interpretation probably fits best somewhere in the employment interview or series of interviews.

5. *Follow-up to find out whether individuals identified as possessing the desired qualities before they were hired or placed on the job do in fact succeed on the job to a greater degree than those identified as lacking those qualities.*

In a surprising number of companies using psychological tests in selection, there is no systematic attempt either to check up on any of the individual tests or on the effectiveness of the selection procedures as a whole. Sometimes, instead, a consultant's opinion of a test is accepted without question, or a single striking confirmation of the opinion of a company officer about one of the men tested is considered adequate proof of the validity of the whole program. Only by careful follow-up on the job for each individual selected will it be possible

to determine the effectiveness of the selection accomplished and to decide whether in dollars and cents the program is worth what it costs.

Finally, as regards insuring employee acceptance of a testing program, some companies have found that by enlisting worker participation in the planning of the program, not only has the program been put in without too much resentment, but some union officials have welcomed it because the objectivity of the test scores takes them "off the spot" so far as their responsibility to their members for

worker placement, promotion, and the like is concerned. Careful handling of employee relations to make sure the workers understand what the objectives are and how the test scores are going to be used by the company will usually result in worker cooperation. Such cooperation is absolutely essential to the success of a program of psychological testing whether for the purpose of selecting new workers or of utilizing more effectively the skills of those already on the payroll.

By LEWIS B. WARD. *Harvard Business Review*, March, 1948, p. 181:13.

The Personnel Job in a Small Company

HOW large must an organization be to warrant the employment of a full-time personnel director? In answer to that question, a great many managers of moderate-size companies might say that they don't know—"but it should be larger than we are."

During the war the Thomas-Hickerson Motor Company, Denver, Colo., a sales and service organization normally employing approximately 65 people, hired its first full-time personnel director to relieve management of the special personnel problems—chiefly of turnover and recruitment—which bedeviled companies of all sizes throughout the war. This company, of course, was one of the many smaller organizations which set up specialized personnel jobs for the duration. Unlike many firms of its size, however, Thomas-Hickerson foresaw the possible future need for a permanent personnel specialist and thus organized the personnel function with a view to continued operation if the results of wartime experience seemed to merit it. Emergency conditions, management reasoned, had perhaps served to bring the company's normal personnel problems into sharper focus—had shown dramatically how personnel problems had been "spread out thin" among several busy executives whose primary activities were not properly concerned with them. Moreover, management realized that the continuing benefits from sound personnel administration—such as a possible 25 per cent reduction of turnover, for example—meant just as much, relatively, to the success of a smaller company as to a large organization.

Obviously, the big question facing the company and common to any small-size organization contemplating the establishment of a personnel department, was whether the personnel problems were sufficient to demand a full-time specialist's attention. If not, what similar or related functions could be placed in the province of personnel without crossing organizational wires?

In setting up the personnel job, two basic objectives were outlined: recruitment of the most desirable and competent group of employees the company could attract and, through sound personnel procedures and policies, the stabilization of the workforce. One of the personnel manager's first assignments, moreover, was to reorganize and bring up to date all the company's personnel records.

Following an intensive period of organization, it became evident, as management had anticipated, that the traditional personnel duties under a smoothly running program left room for expansion in the personnel director's full-time schedule. This expansion of the personnel job took several directions. The personnel manager was able to devote more time to working with various department heads on their employee problems. Perhaps more important, the personnel manager was in a position to devote adequate time to every employee who wished his advice or active help on job or vocational problems. Under the personnel manager's direction a

full-scale recreation program was also set up in which employees participated so enthusiastically as to leave no doubt of its future place in the company's personnel setup.

This company's personnel director also performs certain ancillary management functions, which in a large company might not be desirable from an organizational standpoint but which in a small company serves to increase flexibility and interaction on the management team. One such function, for example, is that of charting various phases of the company's business activities. This, at first glance, might seem unrelated to personnel problems; but since a substantial percentage of the company's employees are sales or service personnel, the results are of interest to the personnel manager in terms of over-all employee job performance and as an indication of the company's competitive position.

After three years of highly successful experience with its personnel program under a full-time director, Thomas-Hickerson is convinced that other small concerns instituting such programs and *adapting* them to their particular needs could realize similar benefits to those which this company has achieved—i.e., a 45 per cent reduction in turnover, as well as a decided general improvement in employee morale and performance.

—BY L. C. THOMAS (Thomas-Hickerson Motor Co., Denver)

Union and Management Cooperate on Job Evaluation and Wage Incentives

INTRODUCTION of job evaluation and wage incentives at Nelson Stud Welding Corporation, Lorain, Ohio, has resulted in increased production, lower unit costs, and a spirit of friendly cooperation between labor and management.

Before the job evaluation plan was initiated, the views of the union (AFL) were sought, and it was agreed that management and union alike should contribute personnel to install the plan. Job descriptions were then prepared, and the jobs were evaluated by a simple point system. The plan was then submitted to the union for approval and, after a few changes had been made, the new base rates were placed in effect.

After the base rates had been established, it was thought advisable to use the same union and management representatives to install the wage incentive program. This, too, met union approval. As a preliminary step, certain features of the plan were outlined:

1. Rates should be guaranteed to the workers except when changes occurred in material specifications, design of parts, tools and equipment, machine feeds and speeds, quality of product and service provided.
2. All rates must be established by method analysis and time studies.
3. Operators should be paid only for good (accepted) pieces produced.
4. All employees working on the incentive plan would be guaranteed their hourly base rate for the total actual hours worked regardless of performance.

When the basis for this standard hour incentive plan had been established, standards were set in all direct labor departments. Though in some cases the standards were of the group incentive type, the majority of them were individual. Standards under this plan are expressed in terms of standard allowed hours per 100 pieces, and include allowances for: necessary personal time, unavoidable minor delays, fatigue, and machine allowances when there is machine time. With this plan in operation, the direct employees have increased their take-home pay approximately 35 per cent and have noticeably lowered the unit cost of the company's product.

Nelson also has an incentive plan for indirect workers. The standard indirect hours allowed are based on the ratio of the necessary hours of indirect labor to the direct earned standard hours in the departments affected.

More than 95 per cent of the employees are now working on incentive and earning more money each day. Labor turnover at Nelson is at a minimum, and the workforce has doubled in the past year.

—BY GENE P. HOPKINS (General Works Manager, Nelson Stud Welding Company)

• **THINGS ARE MOVING** so fast nowadays that people who say "It can't be done" are being interrupted by someone else doing it.

Industrial Films and Their Use

A NOTABLE trend in recent years has been the increasing use of films in industry. Films are currently being employed by business for many purposes, among them to sell the product, instruct salesmen, inform stockholders, inspire workers, please the public, educate youngsters, convince voters. The object of this discussion* is to appraise the film medium for industrial relations purposes.

The film medium offers industry an imaginative, stimulating instructional method for the solution of such serious problems as those relating to the interest of employees in their jobs, need for greater working skills, understanding of one's responsibilities in our economic system. Thus, films permit visualization of complex operations, enabling a worker to understand clearly the task he is performing. They are valuable in explaining important concepts to workers. Financial reports to employees, for instance, are often more understandable if the figures are visualized. Moreover, the film medium permits a telescoping of industrial operations that would take hours of the observer's time if he viewed them in actual, chronological occurrence. Most important from the standpoint of industrial relations, motion pictures are capable of arousing emotional responses and molding attitudes.

In considering the use of films, it is necessary to emphasize that much of the enthusiasm accorded non-theatrical films has stemmed from their wide and successful use during World War II. The film medium was particularly well

suited, however, to the training problem of the Armed Services, and unless films can pay for themselves in industry they have no real place there.

One disadvantage to the use of films for industrial purposes is the high cost of producing them. Industrial motion pictures have varied in cost from several hundred dollars to several hundred thousand dollars. Some producers have established \$1,000 per minute as the average cost of a non-theatrical motion picture, pointing out, however, that treatment and techniques employed may increase the figure substantially. There are, of course, other film techniques less costly than the motion picture. (For example, the slidefilm or filmstrip can be produced for about one-fifth the cost of a motion picture. Another technique, the slide-motion picture, employs a number of still scenes and furnishes many of the advantages of the motion picture at a substantially reduced cost.)

Effective use of films depends largely on the personal skill of the conference leader or instructor in introducing the film, guiding the discussion, utilizing the supplementary written materials, and relating the message of the film to other company practices or policies. An Army study disclosed that trainees learned 58 per cent more from a film properly introduced than from the film used alone. One technique is for the conference leader or instructor to pose searching questions on the film that the employees should keep in mind as they see it. Another device which will increase the gain in material learned is a written synopsis of the film's contents to be distributed to employees prior to the film showings. Some concerns stress the importance of a discussion period

* Much of the material forming the basis of this article was obtained in connection with a continuing research project at the Harvard University Graduate School of Business Administration for which some 500 industrial films have thus far been studied.

following the film to clinch the points the film raised.

Industrial relations films fall into several major categories.

In the first category are films which report company financial operations to employees. An example of this is "The Annual Report for 1946," a slidefilm made for the employees of the Jewel Tea Company. This film is a visualization of the company's financial statement, though necessarily simplified. It was shown to the 5,500 employees of the company, many of whom voiced their appreciation of the fact that the company made this effort to inform them. The company first distributed to employees copies of the regular annual report, as well as a simplified version of the report done in cartoon style. Then the film was shown. After the film presentation, employees were given a booklet which reviewed the highlights of the film.

Films have been used extensively to build morale or heighten the loyalty of employees. Many concerns, such as the Armstrong Cork Company, Aluminum Company of America, and the Mullins Manufacturing Company have made films which present their histories. Somewhat related to the film which depicts the history of the company are indoctrination or induction films. These have been employed successfully by a number of industrial concerns, including Owens-Illinois, Procter & Gamble, Lockheed Aircraft, American Telephone & Telegraph, the National Cash Register Company, and the Standard Oil Company (N. J.).

Several commercial film producers have made series of supervisory training films which are sold to industrial concerns. One company-produced film of this type is Pratt & Whitney's "It's

Our Job," which emphasizes the importance of the foreman's role to the company and shows how a good foreman dealt with typical problems arising in the shop.

The United States Office of Education made over 400 training films during the war, and a group of these, under the general title of "Problems of Supervision," deals with some of the basic elements of good supervision.* These films are all motion pictures and average about 14 minutes in length. They are supplemented with slidefilms which review their major points and are designed for discussion meetings following the showing of the motion pictures.

Many unions are using films in an effort to achieve industrial objectives. One interesting union film is "Brotherhood of Man," produced by the United Automobile Workers. Aimed at eliminating tension between Negro and white workers in the Detroit area, the film utilizes anthropological data to explode racial prejudice. The information is put forward so well that the government has used the film in certain European countries to help dispel the myth of Nazi racial supremacy.

Finally, there are those films whose purpose it is to provide employees with an understanding of basic economics and the operation of the free enterprise system. The Standard Oil Company has initiated an integrated series of films on the subject of economics. The Nunn-Bush Shoe Company has made a film explaining its guaranteed wage plan to employees.

If they are well-conceived and produced, and if they can pay for themselves, films offer management an

* These film units can be purchased through Castle Films, 445 Park Avenue, New York, N. Y.

invaluable tool for such industrial relations purposes as explaining the interdependence of all participants in our economic system, presenting a fair and rational picture of the problems faced by both management and labor, and underlining the need for cooperative

effort for the eventual solution of those problems.

By PAUL R. IGNATIUS, *Industrial Relations*, March, 1948, p. 15:6.

NOTE: Company films mentioned in the above discussion can generally be borrowed by other organizations. An excellent list of films distributed commercially will be found in *Educational Film Guide*, published by The H. W. Wilson Company, New York, N. Y.

Plan Adds \$1.50 to Every \$1 Saved

ALL-STEEL Equipment, Inc., Aurora, Ill., adds \$1.50 to every \$1 saved by its employees. The only qualifications are that the participants must have worked for the company continuously for two years, and All-Steel profits must be sufficient to warrant the profit sharing.

In the first three years of the savings and profit-sharing plan, All-Steel has contributed more than \$340,000 to the fund. It agrees to invest up to 25 per cent of its profits in the plan.

Employees may save from 2 to 5 per cent of their pay under the plan. For example, a man who makes \$200 a month can save a minimum of \$4 a month or a maximum of \$10. If he saves \$10 a month, All-Steel adds \$15 a month to the account, making a total of \$25. Interest will be paid at the rate of 2½ per cent.

The money is paid back to employees in one of three ways: lump sum, installments, or through a life insurance annuity or endowment income contract that provides a monthly income for life.

Anyone leaving All-Steel Equipment after 10 full years of employment gets back all the money he paid and also the money put into the trust fund by All-Steel, plus the regular interest.

—*American Business* 7/48

For Supervisors Only

ONE of the most interesting publications to come to our attention recently is *Brief*—an internal magazine issued by General Electric Company for its foremen and supervisors. Robert L. Thayer, editor of the magazine, says of it: "This, like several other new programs for our supervisory personnel, is still in the development stage. We are beginning a reader poll. . . . Unsolicited comments have been favorable. . . . Big aims are attention value, strict avoidance of preaching, lightness without impudence, and factual accuracy."

Brief is published by the Employee and Community Relations Division for the Apparatus Department of G.E.; it is strictly professional in its format and appearance; uses two colors throughout; and is profusely illustrated with half tones and sketches.

—*The Public Relations Journal* 4/48

• **ONE OUT OF EVERY THREE PERSONS** suffers from aching or tired feet, according to a Gallup poll, and the loss to both management and workers entailed in absenteeism due to foot disabilities is greater than generally realized. In the interests of better foot health, the American Foot Care Institute, Inc. (1775 Broadway, New York 19, N. Y.) has published two helpful leaflets, quantities of which are available without charge for distribution to employees. The first of these, *Are Your Feet Letting You Down*, presents in popular form the essentials of footwear selection and foot care, with special attention to the safety factor. The second, *The Ten Basic Rules for Foot Health*, is the result of a nationwide survey of foot specialists, and is available in poster, letterhead, and envelope-stuffer sizes.

Production Management

Machine Tools and National Security

MACHINE tools were one of industry's biggest bottlenecks in World War II. We never did complete the job of tooling up despite a sixfold increase in annual volume, from \$200,000,000 in 1939 to \$1,320,000,000 in the peak year 1943. That must not happen again. It can be prevented by stepping up production, building a reservoir of new tools now. And many more tools could be put to work now producing more goods at lower unit costs.

Is the industry ready to tool up our economy for another war if necessary? The answer is yes—with qualifications. Nobody knows for certain what type of production would be required. Revisions take place with each new advance in war technology and much information of this type is top secret. Manufacturers are not given the facts about new material required until orders are released. Such procedures lessened production for lack of advance planning in World War II.

Nobody knows for certain how many machine tools will be on hand if and when the emergency should be declared. In 1945 U. S. industry (and the military) had 1,711,137 machine tools, of which 827,431 had been built since 1940. In addition, 121,404 tools were exported. About 175,000 additional tools are estimated built in 1945-47—54,000 exported.

While some post-1940 tools have been retired, scrapped or exported, it is almost certain that 750,000 machine tools now in use or stockpiled are under eight years old—a big improvement over 1940's total of 276,165

under 10 years of age. Condition of currently used tools is a factor. It cannot be overlooked that in five years of three-shift operation many tools were used at one and one-half to three times the prewar rate. Wartime maintenance was below par and many operators were inadequately trained. Result: Age is not an accurate index of the utility of industry's newest machine tools.

Replacement programs face a 20-year write-off allowance for tax credit on depreciation. In this connection, Sweden's experience is worth noting. It is reported that because Sweden permits one-year depreciation of machine tools, the industry is retooling to a point far in advance of American machine tool builders technologically and all Swedish industry is retooling at an unprecedented rate.

Government stockpiling is also an influence. The Munitions Board has been authorized to set aside some 92,000 machine tools. General-purpose machines do not require stockpile replacements soon, but special-purpose machines' obsolesce far more rapidly. Unless war comes in three to five years virtually all tools now being stockpiled will be obsolete for high production, though usable as stop-gap equipment not available in World War II.

What will the machine tool potential be? Present capacity of the tool building industry is estimated at half World War II's peak, or \$600,000,000, with present production at half that figure. Today's machine tools are the most efficient ever, but a good many of the machine tools being used to

produce them are not of latest designs. This is estimated to be true of about 45 per cent of these key machine tools. Greater use of its own new tools and advanced technology by the machine tool industry would save as much as 25 per cent in production time for the industry.

How long would it take to reach maximum production? It took almost four years to tool up American industry for World War II. Planning of the type outlined below could shorten the period of national preparedness:

1. *Repeal of Treasury Regulation 102* (the 35 per cent surtax on undivided profits). Fear of this regulation has restrained manufacturers from plowing back virtually all their profits into plant expansion.

2. *Recognition by Selective Service of certain types of jobs in the industry as essential.* A clear, permanent definition at the outset of the types of men to be deferred would aid the industry greatly to meet production goals despite loss of men to the services. During the recent war classifications of industry personnel were changing constantly, frequently with no forewarning. Resultant dislocations were severe, particularly where a local board deviated from current pattern by calling up certain men previously deferred.

3. *Institution early in any emergency of an effective and efficient priority system.* A great fear in the industry is that the tested plan will be junked and new theories tried. They recall the Control Materials Plan, which came only after bitter experience but which had been outlined in the discarded plan drawn up by E. R. Stettinius, Jr., in 1939.

4. *Government subsidies of the machine tool industry.* Construction of standby plants prior to the emergency

would lessen the burden of expansion. Educational orders financed by government would give the parts industry an idea of the types of tools needed and allow parts and machine tool manufacturers to discuss plans while there is still time.

5. *Pooling of orders.* This practice was followed during the last war. The government places its orders in a machine pool and the manufacturer takes his orders from that pool. This allows larger-lot manufacture and could constitute one form of stockpiling.

In the past the machine tool industry has had to sell 15 to 20 per cent of its annual production abroad to stay in the black. What of the Marshall Plan? As such, ERP will not provide tools for Europe. These will be furnished to individual companies through the Export-Import Bank, which grants loans only where reasonable security is available. Hence ERP nations must look elsewhere for most of their machine tools. However, the Economic Cooperation Act provides almost two billion dollars for unspecified items, any part of which might be spent for machine tools if the ECA Administrator chooses to do so.

Roughly half a billion dollars of all types of machinery will be sent to Europe and China in the first 15 months of the Marshall Plan. Perhaps 20 per cent of this will be for machine tools. Students of the situation say that ERP nations need \$150 million in machine tools to fill basic requirements. Virtually every machine tool sent to Europe and China will represent an addition to existing inventory for use in war production.

Government fiscal policies make replacement of machine tools quite unattractive, and many worn-out or obsolete tools are still in use. This is true in the machine tool industry it-

self and operates to limit sharply the potential of the industry. There is nothing to prevent recurrence of the same tragic mistakes we made in World War II despite the present stockpiling program of 92,000 tools which the Munitions Board wants doubled. Even then, the goal would

fall far short of the mark. Machine tools cost money. Enough of them to support a war would cost a lot of money. But no less than strategic materials and airplanes, machine tools mean national security.

Factory Management and Maintenance, June, 1948, p. 66:7.

Plant Neutralizes Own Waste

INDUSTRY is taking a long look at its part in the problem of stream pollution. There's a trend to incorporate facilities for waste treatment in today's plant design. Case in point is the New Departure Division of General Motors at Sandusky, Ohio.

Numerous metalworking operations producing all kinds of liquid wastes made New Departure's problem particularly tough. Waste originates at nine chief points: (1) ball shop, (2) press room, (3) machinery, (4) heat treating, (5) grinding, (6) pickling, (7) chrome plating, (8) laundry and drycleaning, and (9) forge shop—with alkalies coming from plating, steam cleaning, laundry, etc.; spent pickle liquor from steel descaling operations; acid-bearing waters from chromic-acid rinse and Parkerizing systems; and oil-and-water mixtures used to cool cutting tools.

Planners went to the State Department of Health, learned that the water flow in adjacent streams was not enough to dilute toxic wastes that might harm cattle. Also floating oil would make a Grade A fire hazard. The following requirements were agreed upon: Chromium should be no more than two parts per million; emulsified oils, 30 p.p.m.; suspended solids, 20 p.p.m.; and pH range, 7.0-10 (the measure of water acidity).

Right away it was found that wastes were chemical in nature and could be used to neutralize each other. The pickle liquor helps the weak-acid waste neutralize the alkalies, also helps separate soluble oils from the coolants. Wastes are held in a reservoir against the possibility that the flow rates and degree of contamination will vary with operations.

Two basic systems are used, each of which does a double job. Alkalies are taken through overhead pipes to receiving tanks. Coolants and solubles are discharged at a time when little or no alkalies are flowing. Likewise, when old pickling-tank acids must be removed, they are flushed through the same lines at a time when waste pickles and rinses are not being drawn from the chromeplating tanks.

Chemical treatment allows control of flow rates of raw waste and treating agents, automatically. Also, wide ranges in pollution concentrations can be handled with the same basic equipment, and the system can be adapted to future changes in production which may introduce new pollution factors. Power costs are low.

At this stage of the game, there's no pat formula for pollution control in industry. All methods should be studied—reclamation, dilution, segregation or treatment at the source. Possibilities of neutralizing one waste with another should be considered. The layout should be flexible enough to handle considerable variation in composition of wastes and possible changes in process liquids or production methods.

—*Business Week* 8/21/48

AMA AUTUMN PRODUCTION CONFERENCE

The Autumn Production Conference of the American Management Association will be held on Thursday and Friday, November 18-19, at The Hotel Drake, Chicago.

The Problem of Resistance to Change in Industry

A MEDIUM-SIZED Middle Western manufacturing company recently installed a new and greatly improved wage incentive plan at a cost of over \$20,000. Outside engineers did an excellent job technically and management was satisfied. But only three weeks later the new plan had to be abandoned and an investment of \$20,000 totally lost. Why was this?

Industrial progress finds one of its greatest handicaps in the resistance of both management and worker to change of any sort. Even innovations obviously advantageous are often subject to attack. Honest and loyal employees will sometimes lie, misrepresent, and engage in outright sabotage of the new procedures, so bitter are the antagonisms aroused. Large groups may react with equal violence when their status or security is at stake.

The amazing feature of these attacks is that many of them come from employees who have no real ground for anxiety about their status or security. While it is customary to attribute these resistances to the reluctance of people to change well-established habits, it is probable that the chief cause lies far deeper.

The principal root of this hostility is fear, reinforced and rationalized by resentments and rivalries. Deep-seated fears exist within the individual himself. Everyone knows fear. Furthermore, everyone is constantly faced by real and tangible grounds for anxiety and insecurity. The real fears which beset the average person are legion.

Unfortunately, nearly all persons also suffer in some degree from neurotic anxieties and fears having no basis in reality. Many of these fears are too painful to be faced—they can-

not be lived with. Hence, they have been thrust out of the center of consciousness, out of sharp focus.

When a new challenge to the individual's status or security arises, it accentuates his existing anxieties. The added fear can upset his emotional balance. Reinforced, his latent fears threaten to become painfully conscious, affording a powerful incentive to rid himself of the new danger to his security.

Fears which even trivial changes arouse are often so overwhelming that they can induce a state of panic. A direct, logical presentation of the merits of such changes is often futile for this reason. The more they are discussed, the more violent the anxieties they arouse and the greater the individual's need to discredit and eliminate them.

Even worse is an attempt to explain to him the sources in himself of his antagonism. This only makes him react more violently since it mobilizes fresh anxieties and breaks down his defenses against them. It forces him to face his naked fears himself and makes him aware that others know his weakness.

Great caution must therefore be exercised in making any changes in organization or method, even those obviously needed. Sometimes it is better in the long run not to make moderately needed changes because the disturbances they will occasion may be more costly in the end than will a continuance of the status quo. Where there is some real threat to an employee's status in the change, it may prove wiser and cheaper to put him on some "advisory" job rather than risk the organization-wide disturbance of morale which his demotion might bring. One individual, if sufficiently aroused, can

disrupt the morale and functioning of a whole segment of a business.

Only one innovation should be introduced at a time. Ample warning must precede it and a full statement should be given of the reasons for it and the benefits which are expected. There is then less likelihood that the emotional equilibrium of the individual or group will be upset. Informing employees in advance does much to allay the fears a sudden change might arouse. There will always be some anxiety but this will minimize it.

Maximum opportunity for discussion and planning of the proposed changes should be given in advance of their introduction. Employees should have some voice in deciding how and when changes will become effective. This gives them the satisfaction of having some part in the determination of their own destinies, tends to minimize their feelings of helplessness and consequent anxiety. At the same time it gives them better insight into the conditions calling for the changes and the benefits which can be expected.

It is imperative that ready outlets be provided for the expression and relief of the hostilities which almost

inevitably arise. The employees affected should be able to "talk out" their anxieties and resentments from time to time. Periodic, informal meetings of small groups with a representative of top management can provide a release for accumulated tensions. By bringing resistance out into the open, these meetings dissipate the rancor of the worker or supervisor before he has a chance to disrupt departmental morale. They also provide another opportunity to review the value of the new procedures.

The resistance of workers, supervisors, and executives to change is irritating and often frustrating, especially when changes are designed specifically to help them. However, if it is recognized that it is their basic anxieties and insecurities which underlie and stimulate their lack of cooperation—not sheer stubbornness or stupidity—a more understanding and sympathetic view can be taken of the problem and an informed course of action undertaken to insure acceptance of changes involving even a number of radical innovations.

By R. N. McMURRY. *Journal of Applied Psychology*, December, 1947, p. 589:5.

What Is Present Status of Labor Productivity?

WHAT is happening to labor productivity—is it rising, falling, or remaining the same? To find out, *Mill & Factory* conducted a survey among all sizes and types of manufacturing companies.

The survey shows:

1. Compared with one year ago, labor productivity of employees has remained about the same, 54 per cent of the respondents indicate. An increase is reported by 31 per cent.
2. Labor productivity of employees is still less than that of the prewar period, 54 per cent of the respondents state.
3. Labor productivity of employees is not at a satisfactory rate, in the opinion of 69 per cent of those replying to the survey.
4. Compared with one year ago, unit labor costs are higher, according to 74 per cent of the respondents.
5. According to all indications and if business stays at least at its present rate, labor productivity one year from now will be about the same as now, the majority, 57 per cent of the respondents believe.

—*Mill & Factory* 8/48

Marketing Management

Population Trends—Basic Trade Factor

FROM \$6.5 billion annually in the decade 1869-78, national income in this country has grown to more than \$200 billion. Much of this increase is rightly ascribed to mechanization, which has multiplied the value of the individual's daily labors. But another important contributing influence has been the gain in population from 43.5 million in the decade 1869-78 to some 145 million today.

The outlook for business will be greatly affected by both these factors over the coming decades.

While informed guesses can be made as to the nature and extent of technical advances over the next few years, effects in 40 or 50 years are purely a matter of conjecture. But population forecasts are more possible. Despite the fact that size and composition of future populations will be affected by unpredictable factors like war, changes in immigration, or birth and death rates, it is possible to establish a range within which the population will likely fall at any future date.

By various assumptions as to future birth and death rates and immigration levels, a tentative forecast provides useful information about the size and composition of future labor and consumer markets. A recent Census Bureau study of this type indicates that by 1975 population will range between 185.1 and 151.1 million—185.1 million assuming high fertility, low mortality and immigration at 200,000 annually; and 151.1 million assuming low fertility, high mortality and no immigration.

Using a third set of assumptions—medium fertility and mortality and no immigration—forecasts have been projected to the year 2000. On this more realistic basis, the 1957 total would be 162.3 million, a peak of 164.6 million would be reached in 1990, and a moderate decline would set in thereafter to 163.3 million in 2000. These figures indicate that American business will be operating in an expanding economy for more than 40 years to come.

Predicted shifts in age groups are even more significant. Because of advances in nutrition and medical science, shorter hours of work and other factors, people are living longer. In 1900 the median age of the population (the level dividing the younger half from the older) was slightly over 22 years. Today it is about 29.9 years. By 2000 it will be 37.4 years.

This shift involves a relative and absolute decline in the age group 19 and younger, which in 1900 was 44.3 per cent; in 1946, 33.4 per cent, and in 2000 will be only 25.7 per cent of the population. Thus, a decline in the economic significance of children's furniture and clothing, baby food, toys, school supplies and many other items may be anticipated.

A significant distinction may be drawn between the age level five and under and the level five to 19. The under fives have already reached peak, while the 5-19's will increase from 33.7 million in 1946 to a peak of 38.4 million by 1960. Thus the market for goods used by school-age children will expand for 12 more years, and the

demand for schools, school supplies and teaching services will rise even further and for a longer period.

The number of persons 65 and over has also increased—3.1 million in 1900 and 10.4 million in 1946, with 21.6 million estimated for 1990. In 1900 people in this group comprised 4.1 per cent of the population, in 1946, 7.3 per cent. In 1990 the figure should be 13.2 per cent. This group adds little to the nation's production since its income is derived almost entirely from capital—notably the assets of life insurance companies. However, it does represent a considerable market for goods.

There are two major divisions in the work-age group of 20-64: The 20-44 group will show little change from 54.7 million in 1946, 59.4 million in 1980 and 56.5 million by 2000. Those 45 to 64 will increase steadily from 29 million in 1946 to 43.3 million in 2000, or from 20.6 per cent to 26.5 per cent of total population. Result: a small gain in the proportion of working population, though the gain appears in the less efficient age group, accom-

panied by a relative decline in the more efficient working group.

The number of marriages within the population affects demand for housing, household furnishings and appliances. New marriage records in 1934-37 and 1940-42 aggravated shortages of these items, as did the 2.3 million record for 1946 and the lower figure of 2 million for 1947. The rising birth rate indicates another marriage boom in 20 or 25 years, with an accompanying demand for housing and other new-family needs.

The vulnerability of population estimates to developments of this character is shown by the fact that a study in 1943 called for a population peak in 1990 of only 160.4 million. On the other hand, the changes in age distribution anticipated by the 1943 study and the Census study under consideration here are almost identical. Thus long-range business planning on the basis of population forecasts can be carried on with considerable assurance.

Financial World, April 28, 1948, p. 3:2.

Implications of the Basing Point Ruling

SWITCH of the cement and steel industries to f.o.b. pricing has brought forcefully into focus the vast economic implications of the FTC crusade to crush the basing point system of delivered prices.

Since the new pricing system means substantially higher costs for many producers located at a distance from the major points of supply, the whole pattern of competitive relationships among sellers and among buyers may change substantially.

Cost dislocations may be cushioned during a period of shortages, but important changes in market patterns would be inevitable once the sellers' market disappears.

The first reaction among some industrial leaders has been to run to Congress for a reappraisal of the anti-trust statutes, with a view to legalizing what once existed.

But the political consequences of f.o.b. pricing are by no means so apparent as the economic.

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If decentralization is the consequence of f.o.b. pricing—that's fine with many southern, midwestern, and western members of Congress.

And others may find it a lot easier to let f.o.b. run its course than to run the risk of voting to modify antitrust statutes which have been on the books so many years.

FTC has been after the basing point since the Pittsburgh Plus case of nearly three decades ago. But its fight was a losing one—until Congress enacted the Robinson-Patman Anti-Discrimination Act 10 years ago.

Armed with this omnibus statute, FTC conclusively convinced the Supreme Court in the glucose and cement cases that the basing point pricing system was little more than a "reciprocating engine" which, through "phantom freight" and "freight absorption," enabled industry members systematically to match competitors in distant markets by discriminating against nearby customers.

Chief FTC spokesman on basing point issues is Walter B. Wooden, associate general counsel who was in charge of the cement case. He sees the cement decision as the equivalent of the atomic bomb—an ultimate weapon, against which there is no defense.

As Mr. Wooden sees it, his victory over the basing point "may be our last chance to restore and preserve a real competitive economy, one in which local enterprise is not the stunted and stifled victim of predatory discrimination."

Mr. Wooden looks at the basing point delivered price system as an industry-wide effort to stabilize prices by preventing the buyer from having any voice in price-making. Even among the sellers, he says, it is a price

established by the leaders to serve their own interests.

But Benjamin Fairless, President of U. S. Steel, who contends that the systematic meeting of delivered prices of competitors is essential to maintenance of competitive industry in this country, and beneficial to many businesses, large and small, says:

In our judgment, we were fully justified in meeting in good faith the price of a more favorably located competitor. Competition was stimulated and not hindered by such a practice. Naturally, meeting competition in this way resulted in differences in the net proceeds of the producing steel mill on sales of the same product to different customers located at different places. This is evidence of competition, not of its absence.

Arguments pro and con are pouring in on a special Senate subcommittee headed by Senator Homer Capehart (R., Ind.) which has been instructed to look into the problem, with a view to offering legislative suggestions some time next spring. The Capehart investigation well may become one of the most significant activities of the 81st Congress.

If the Capehart subcommittee follows FTC Commissioner Lowell Mason's advice—and he is certain to exert considerable influence in the proceedings—one of the chief results may be the creation of government machinery capable of providing business with authoritative assistance in formulating sales policies consistent with the law.

Before it finishes, the committee may comb over the Robinson-Patman Act, in an effort to remove some of the ambiguities which place sellers in danger.

At the moment there is no indication that the committee would go far enough to revise the concept of equal mill net prices which is the source of FTC's "atomic victory" over the bas-

ing point. This concept, contained in Section 2(a), enables the Commission to attack basing point delivered price systems, even though it is not possible to show that a price-fixing conspiracy exists. For the phantom freight and freight absorption characteristic of the

basing point delivered price system result in differing mill nets on sales to various customers, an illegal practice regardless of whether conspiracy exists.

By STANLEY E. COHEN. *Industrial Marketing*, August, 1948, p. 39:3.

Product Previews Give Workers Insight to Marketing

ARE people in factory and office curious about how the products they make are sold? Gillette Safety Razor Co., Boston, thinks so. Before launching its new blade dispenser, Gillette threw a New Year's party for 200 key employees to explain ABC's of its plans. The party was attended by company executives, supervisors from the Boston plant, and 25 ladies from the home offices—the first time in company history ladies had been present at a new product review.

The event consisted of an hour-long social gathering, at which champagne and a dinner were served, followed by the presentation of the company's plans. The new product was introduced by a beautiful girl who stepped out on a stage carrying a large container from which a giant razorblade protruded. After this display of the mammoth likeness of the new product, regular-size dispensers were distributed to the audience.

With the aid of illustrations and messages on placards, one of the firm's vice presidents showed how the mechanical features of the new dispenser had been presented at the sales meetings. The features of the company's sales program were then described to the group, the way in which the mechanical evolution of the dispenser and the razor was presented to salesmen was indicated, and plans for marketing the product at home and abroad were outlined.

Another series of placards was used to outline effectively the advertising campaign that had been planned to launch the product. This presentation followed circus build-up methods, embodying, for example, such phrases as, "The Best Act in the Main Tent," referring, of course, to the introduction of the product.

Indicative of the favorable personnel reaction to the program were the numerous comments on it made by those who had attended, not only during and immediately following the party but also in recent interviews. Moreover, production has been stepped up materially in the interim, a fact that the company attributes largely to the insight into marketing problems gained by key plant men as a result of the party.

—BERNARD G. PRIESTLEY in *Sales Management* 5/20/48

It's an Idea

NOW that men are travelling again, it may be well to remind the younger generation of an old but effective stunt: Number the letters to each salesman. If the man arrives at a new town and receives a communication from the home office in an envelope numbered 20, and his last one was numbered 17, he can immediately check with the hotel he has just left or with the home office to find out what was in 18 and 19.

—*The Advertiser's Digest* 2/48

- ADVERTISING READERSHIP TESTS prove that the way to catch the interest of feminine prospects is to run ads featuring illustrations of women. On the other hand, masculine readers respond more quickly to ads showing men. In one instance, 50 per cent more women than men remembered a certain advertisement for a strictly masculine product because the illustration showed a woman in a strictly feminine environment.

—Hardwick & Magee Co. (quoted in *The Advertiser's Digest*)

Financial Management

What Makes the Boss Work?

IS it lust for money that makes the boss work? Or what reward does he want for his efforts?

Elmo Roper, public opinion analyst and industrial consultant, has reason to believe he knows the wishes of present-day executives. He finds almost no distinction between what the bosses want and what the laboring man wants, except in phraseology. Primarily, both want "security." Waiving the question as to whether security is ever attainable by any outward circumstances or must instead come only from within, the bosses believe that their security is to be had out of the following ingredients: (1) recognition of achievement, (2) dignity of position, (3) autonomy of their management, (4) rewards paid in leisure. *Nothing* is said here about money.

In the past, one thing that made business attractive to the men of business was the theory of complete freedom of operation on the executive level, with equally unrestricted compensation for the risk of big decisions. But that was before management's right to set executive compensation policies first came into conspicuous question in 1931, when public attitude toward business was bitter indeed and stockholders were rising up, suing companies they claimed were paying compensation to executives so excessive as to constitute fraud on the stockholders and waste of the corporation's assets. And it was before the U. S. Treasury began to get really tough in the matter of its surtax rates. Today, however, that theory is empty. "Risk"

has become altogether too risky. What is happening today is that the bosses of business are in the confused process of discovering for themselves what the experimental psychologists and a number of sages long have known: Money isn't everything.

In general, companies today are hanging four varieties of carrots before executive noses: (1) the old-fashioned, but renamed, arbitrary bonus, (2) profit-sharing plans based upon the individual's salary and the company's earnings, (3) stock distributions, (4) reinforced emphasis on annuity and retirement plans.

The vast difference between Business Present and Business Past is best set forth by four executive-compensation and incentive plans. It cannot be said that they are the four "best," for the diversities of business are too great. But of all these four, different though they are, it can certainly be said that they "work." They have stood the test of time (i.e., the executives are happy) and of publicity (i.e., they have brought forth little social criticism). In each of them is to be noted the relatively small money compensation now possible.

The Owens-Illinois Glass "management bonus plan," includes general executives and major department heads, excludes the president and chairman of the board. The president, with the approval of the board of directors, determines the participating percentages of those in on the bonus fund. The executive gets his cash bonus early in the year after the total fund is certified

by public auditors and is thus able to deal with the first installment of his income tax on March 15. For the total bonus fund, Owens-Illinois sets aside part of its consolidated net earnings before taxes but after at least \$2 a share has been paid to stockholders of record. What then goes into the fund cannot exceed 8 per cent of remaining net earnings, which in turn cannot exceed 10 per cent of the company's earnings on invested capital. The company also has a production bonus plan and a sales bonus plan, but no officer or employee can be eligible for more than one plan.

Sears, Roebuck & Company has a voluntary savings and profit sharing fund for all employees after one year. Since the yearly maximum employee contribution to the fund is \$250, a supplemental retirement plan is in effect for employees on the executive level. To this the executive's contribution is 5 per cent of salary over \$5,000 and the company adds "an established" amount to this—how much, it does not reveal. To build up further retirement income for its executives, the company from time to time offers to both present "and potential" executives shares of its stock to be purchased at below market prices.

Johns-Manville's profit sharing plan includes senior and junior executives and any other employees who make exceptional contributions to profits during the year, excludes the chairman of the board and chief officer. Amounts given out are semi-arbitrary, in that they are apportioned to each man by the decision of the president, checked by the board of directors and its profit-sharing committee. No one, however, may receive more than 25 per cent of his annual salary. The limitations on the fund are that it must not exceed 7 per cent of earnings calculated after

taxes, before preferred-stock dividends, and \$1 per share on the common—nor may it exceed \$375,000 in any event. (Johns-Manville's 1947 net earnings were \$9,500,000, which indicates the relative modesty of the plan.)

At Standard Oil (New Jersey) an "incentive plan" begins to merge with something that has more the shape of general contentment without legalistic trimmings. The management record of this firm is extraordinary, not only with its labor force but with its own high commands. Salaries are not high as high salaries go: The president gets \$125,000 annually for being chief officer of a \$2.7-billion company, and this is the company's largest salary. There are no bonuses. Standard's directors are all full-time salaried employees; there are 11 of them, and they also constitute the top working management. For everyone in the company, from these men down, Standard has a retirement annuity plan that begins with the first day of employment. Nobody *need* join, but in practice 97 per cent do. The employee contributes from 1½ to 3 per cent of his salary, the amounts rising as the pay bracket rises. The company makes a contribution usually larger than the employee's, and a fund to purchase annuities is thus set up. The aim is to hand a man an eventual annuity that will pay him annually 2 per cent of his average salary while he worked multiplied by the number of years he worked. Standard also has a "thrift plan," uniform throughout the company; if an employee saves 10 per cent of his salary with Standard, Standard will add 3 per cent—or do better if a year is unusually good. All these funds, including Standard's own contributions, can be taken out by the

employee any time he resigns or gets fired prior to age retirement.

The over-all fact appears to be this: annuity, pension, and retirement plans for executives are on the way *up*, and annual cash profit sharing in bonus form is on the way *out*.

What are the effects of money-incentive loss on the general business pattern of the U. S.? For one thing, executives are retiring earlier: There is more tendency for a man to end the acquisitive struggle at 55 and take whatever small pile he may have built up by himself (with or without his company's help), and go and do what he *really* wants. One business philosopher has urged that such matters be seriously and soberly taken into account of the managerial process: that it is the duty of the corporation to

"teach all young executives to play," on the ground that they will not be able to learn when they are older, and that if they cannot learn when their retirement age arrives, their chances of death shortly after retirement are all too good.

Sears, Roebuck (where executives retire at 60 but others at 65) makes the encouragement of hobbies a practical managerial point. Other companies are taking different routes with their older executives. It is not unknown for a corporation to buy a little business in another part of town and ask an executive to "take it over and run it, Jim, it might lead to something important for us if a first-class man took hold of it."

Fortune, April, 1948, p. 104:12.

Depreciation on Original Cost or Replacement Value?

CURRENT operations should be charged with depreciation on the original cost of depreciable assets. So say four out of five of the controllers and financial officers comprising the membership of the Committee on Technical Information and Research of the Controllers Institute of America. The 48 members, representing a geographical and activity cross-section of the Institute's membership, were sent a questionnaire to which 33 replied.

Only six respondents favored depreciation on replacement values, though one of the majority favoring depreciation on original cost did state that current prices should include depreciation on replacement cost. Fourteen members told how they would apply depreciation if replacement value

were used: Three would make charges against current manufacturing costs. The remaining 11 would make a special deduction at the bottom of the profit and loss statement.

The section of the questionnaire asking for remarks produced a most valuable discussion. A chemical company member expressed the hesitation apparently felt by the majority to depreciate on a replacement basis: "The desirability of charging current operations with depreciation on replacement values is recognized from an economic point of view. However, from my observation, all efforts to date toward accomplishing this purpose have involved disadvantages which seem to outweigh benefits."

Others are more specific in their objections and suggestions. One mem-

ber (representing a public utility) does not believe that present-day costs should be burdened with future invested capital which may or may not be higher than present costs. He sees no objection, however, to appropriating a certain amount of surplus to take care of estimated future capital. Another member, from a railroad company, takes a moral view: "It is more honest procedure to tell the stockholders why it is necessary to withhold from dividends an amount sufficient to cover replacement costs than to cover up the additional deduction in depreciation charges."

A university professor admits that an approximation of replacement costs would be of help for insurance purposes in problems of pricing, in long-range plans for equipment replacement, and in interpreting the results of current operations. For tax purposes, however, he would prefer that more freedom be granted to management in determining the period over which the cost of any fixed asset is to be depreciated.

A chain and cable company member offers the following suggestion: "Depreciation should be charged against current operations based on the original cost of the equipment, and the rate should not be charged so long as the equipment is in use. Depreciation on specific equipment would thus continue after the asset had been fully written off. However, we should combine depreciation and repairs into one reserve account, the combined provision reaching perhaps four to six times normal depreciation rate." Another member wants provision against lavish spending: "For many companies it would be sound practice to set up a separate fund to accumulate cash or its equivalent for the amount of depreciation charged off. This is particularly true where replacements are

large and occur in infrequent intervals. Otherwise working capital is inflated, and the money is apt to be spent, thus defeating the very purpose of depreciation reserves."

A public accountant envisions wartime possibilities: "In view of present uncertainties in world affairs, it seems prudent to recognize replacement values because operation of plants by the government in event of war might make it necessary to produce facts and figures if stockholders are to be reimbursed for use of facilities based on value of property used. At any rate, all prices or costs will never go back to prewar levels."

The role of accounting and the function of the depreciation reserve are discussed by a number of members. A chemical company representative says: "The role of accounting is to show the historical facts as they actually exist or happen for any period. Accounting should not be made a tool for expediency or gambling with future possibilities insofar as expressing current earnings are concerned. Financing needs of a business can never be changed by bookkeeping methods. Hence, if a company presents its historical facts on a constant basis which everyone understands, then possibility for proper interpretation of the facts in terms of future needs is much more certain."

Another chemical company representative thinks that any special provisions or appropriations for expected increased replacement costs are really a function of allocation of earnings or capital and not of operating costs. Still another chemical company member observes that the problem of replacing fixed assets at inflated costs is an economic rather than an accounting problem. "While it is generally agreed that accounting is not an exact sci-

ence," he points out, "it should also be agreed that accounting deals with actualities rather than potentialities. It should not be the function of accounting to place manipulative values on any investments and thus submerge the basic financial considerations of acquisition."

One member sums up the problem as follows: "The purpose of depreciation accounting is primarily to allocate properly and equitably the cost of existing facilities, not to provide funds for replacement."

By I. D. DAWES. *The Controller*, July, 1948, p. 350:3.

Insurance

Don't Bet Against Accidents

GIVEN the right ingredients—statistics and experience—any good actuary could publish a dope sheet of odds on most anything. In fact, if you want to know what's predicted for the next year, you'd do better going to an insurance company than having your tea leaves read.

Take marriage or accidents, for instance—some folks maintain they're both a result of carelessness. Admittedly, the actuary doesn't know what will happen to you personally during the next 12 months, but he does know the probabilities you face, figured out on the basis of experience compared with population. Actually, the odds are against most everything except taxes.

If you're single, the chances against your getting married in the next twelve months are 7 to 1. Happily, the odds against having a traffic accident are a little longer: 156-1. But if you're in an accident, the odds against your being injured are only 13 to 1 and 10 to 1 against landing in a hospital—a good combination for the daily double, if we ever saw one.

Of course, the actuary doesn't stop there. He has it figured out that your chances against being hit by lightning are 330,000 to 1, getting killed on a train 1,000,000 to 1, and getting killed in an airplane 2,700,000 to 1. The odds against your being killed in an automobile drop down to 4,800 to 1.

If you'd like to know if the long arm of the law is going to tap you this year, chances that you won't be arrested are 166 to 1. And if you're just wondering about things in general, it might be interesting to know that it's a lot easier to win the Irish Sweepstake than to have quintuplets. The odds against the latter are 490 million to 1.

The catch is, no one ever knows when he or she is going to be the character who proves the odds; and if enough people prove them, the odds are no good anyway. The fact that 100,000 persons were killed in accidents last year alone would seem to indicate that bucking the probabilities isn't such a long shot after all. You, or you, or you may be the next unlucky winner.

Take the case of Dr. Peter Caprow, a Chicago dentist. Offhand, he'd say his chances of getting shot by a street-car were scarcer than cavities in hens' teeth. But he was standing on a street corner recently when a trolley car came along and touched off a bullet on the tracks. Dr. Caprow was shot in the leg. Then there is motorist Stewart MacKenzie of Graniteville, Vermont, who'd be willing to give plenty of odds that he wouldn't be kicked by a horse that wasn't there. That is, he gave odds until last June, when a horseshoe, flung by a horse that had galloped past, crashed through Mr. MacKenzie's windshield and hit him in the face.

Walter C. Goff of Chester, Ill., a man with a sense of humor, used to say "I thought I'd die laughing"—until he nearly did it. A piece of food lodged in his throat when he laughed recently and he had to be rushed to a hospital to have it removed. And Franklin Larrain of Cutoff, La., got a small fish caught in his lung when he dangled it above his mouth to amuse his daughter. The fish slipped.

Entertainers have been having their troubles, too. In Detroit, Anthony Mareno, a sword swallower, substituted a neon tube in his act. The tube broke and Mareno got a sore throat. Thomas Mays, a magician with a carnival showing at Creston, Iowa, was so good at making a quarter disappear that he had to undergo an operation to get it out of his stomach.

A man in Kansas City, Mo., was accidentally shot while taking a loaded pistol from his icebox; and another in El Dorado, Kansas, had his parked

car damaged when a house ran into it. The house was being moved to another location, but the Kansas City man never explained why he was chilling his John Roscoe.

Mrs. Louise Horn of Oildale, Calif., on the other hand, learned recently that her chances of having accidents vary with changing women's styles. She was wearing her first "new look" dress, and when she started to get off a bus the long skirt caught in the closing doors; then the bus started off. Mrs. Horn had to sprint to the next bus stop. Luckily she had been on the women's track team in college.

Ever shoot yourself with a bow and arrow? Pete Stewart of Vincennes, Ind., borrowed his son's archery set and shot a shaft upward. It fell straight down, thus disproving the first lines of that poem about "I shot an arrow into the air. . . ." and giving Mr. Stewart a scalp wound. Then there was Marc Donnelly of Johnston City, N. Y., who was shot by a briar pipe. A friend was smoking the pipe when suddenly a 22-caliber bullet, which had somehow gotten mixed in the tobacco, exploded and struck Mr. Donnelly in the face.

Maybe the odds against anything happening to you are long. They look pretty good on paper. However, a lot of people injured in accidents will point out that they had the same odds. Look at the traffic accident dope sheet again: The chances against being in a traffic accident are 156 to 1. But last year there were over 1,100,000 injured people claiming to be that one!

BY LAFE LOCKE. *The Eastern Underwriter*, June 18, 1948, p. 44:2.

Keeping Your Pension Plan Sold

YOU undoubtedly spent a great amount of time and expense in launching your pension plan. Perhaps you published an attractive booklet, made personal explanations and used all the fanfare announcing the arrival of a new baby. But how about your child today? You feed it regularly with a handsome annual deposit—but have you continued to dress it in the latest fashion? Have you shown baby to the family? Told the folks how healthy he is?

Your employee must continue to realize that he is a member of the plan in good standing and that he is constantly accumulating tangible benefits in dollars and cents. Why not personalize the employee booklet with a section where his name, date of birth, and accumulation of service can be filled in in ink, leaving space for future benefit recordings as they accrue each year? If the booklet is simple and clear, he can make these entries himself, especially if you include a table of benefits based on salary instead of an abstract formula.

The annual valuation of a trusted plan—or the statement of the carrier of an insured plan—is most interesting to management. Why not dress up the salient features of this annual summary and give it a spread in the house organ? Let employees know

exactly how many employees have retired, the size of the fund, the investments of the fund and other such developments.

Or a colorful letter from management to each employee itemizing his benefits for the year will stimulate his interest in keeping the record current. Many other methods, too, accomplish the same purpose.

Company bulletin or magazine can remind him that the pension plan is constantly functioning. Informal news items about retired employees receiving benefits and about others looking forward to retirement shortly will interest active employees.

The newly eligible member of the plan, who probably waited from one to five years before becoming eligible, experiences a sense of achievement at this point. Why not bolster his pride by having an officer well versed in the plan sit down with him and explain the benefits he is going to receive?

Retirement plans cost a lot of time, effort and money. A little salesmanship will assure you that your employees have the maximum appreciation of their benefits, and the full value of the plan will thus be realized.

By **WARD S. KELLER**. *Central Hanover Pension Bulletin*, July, 1948, p. 4:1.

• **NEARLY 40,000 PERSONS** are killed annually in the United States in land and air transportation accidents, despite the fact that transportation has become safer in the past few decades, the statisticians of Metropolitan Life report. Today, automobile accidents are responsible for about 70 per cent of the mortality from land and air transportation mishaps among the Metropolitan's industrial policyholders, as against less than 20 per cent in 1911-15. In the same period, a drop of 80 per cent was recorded in fatalities due to railroad accidents, which used to take a heavier toll of life than any other means of transportation in 1911.

—*Insurance Advocate* 6/5/48

Five Factors in Embezzlement

THE Chicago Crime Commission, in an attempt to determine some of the factors that contribute directly or indirectly to the offense of embezzlement, queried companies writing fidelity bonds. Analysis of replies from more than 20 indicated that the factors most frequently present in embezzlement cases are, in the order of their frequency: gambling (the most prevalent type in recent years being wagering on horse racing), extravagant living standards, unusual family expense, undesirable associates, and inadequate income.

It is unlikely that an employer would know, without deliberate effort, whether these factors affect his employees. Even in the case of the fifth factor, inadequate income, the employer is not likely to be aware he is underpaying unless he is more realistic than are most employers.

Some surety companies attribute more of their losses to extravagant living standards than to any other single cause. Wartime high wages raised the standard of living of many people to a level they cannot now in all cases sustain. The manager of an industrial life insurance office in a populous center recently indicated he was spending almost three days a week cashing policies. Most of them are on wage earners who will not relinquish their war-established standards until the last resource is gone. Such circumstances might cause some employees to go beyond their last resource and take something that belongs to their employers.

Some firms have a definite policy against prosecuting dishonest employees. Furthermore, the losses in the exceptional cases that are publicized are frequently minimized in newspaper accounts. The employer may withhold many facts to avoid unfavorable publicity. The total amount of money lost annually through embezzlement, if the truth were known, would reach astronomical sums. The statistics of surety companies do not show the complete picture, since many employers do not carry fidelity coverage, and the total losses of employers who do not bond their employees are far in excess of the amount of the obligation of the sureties.

In suggesting ways of preventing embezzlement, the Chicago Crime Commission outlines many of the steps the surety company takes in writing a fidelity bond. For example, the character, personal habits, credit standing, and reputation of the employee should be determined by inquiry in the neighborhood in which he resides. The nature of his associates and information regarding his family background and reputation should be ascertained. His past employment record should be carefully checked. All pertinent statements made when he applied for the position should be verified. It should be determined whether the applicant has an arrest or prison record. The Commission has recently noted many instances of embezzlement, involving large sums of money, by employees who had former criminal records. This information would have prevented the employment of such individuals in positions of trust.

—*The Casualty Insuror* 6/48

1947 Death Rate at New Low

THE death rate from all causes among U. S. life insurance policyholders reached a new low in 1947 at 737.9 per 100,000, with declines shown for practically all causes of death including heart disease and cancer, the Life Insurance Association of America reports. The 737.9 rate compares with 773.1 in 1946 and 763.9 in 1942, the previous lowest rate. These results are indicated by the experience of companies representing 73 per cent of the ordinary and industrial life insurance policies in force in all U. S. companies.

—*Insurance Advocate* 5/29/48

AMA INSURANCE CONFERENCE

A Conference of the Insurance Division of the American Management Association will be held on Thursday and Friday, December 2 and 3, at The Hotel Drake, Chicago.

BOOK NOTES

[Please order directly from publishers]

CARTELS OR COMPETITION? By George W. Stocking and Myron W. Watkins. Twentieth Century Fund, New York, 1948. 516 pages. \$4.00. The second of a series of three reports growing out of a survey on international and domestic monopolies (the first volume, *Cartels in Action*, was published in 1946), this study gives the reader an over-all view of the development, growth and effects of the cartel movement as a whole. Estimates the extent to which cartels affect the foreign trade and domestic markets of the United States, and examines the influence of cartels in industrial stability, volume of employment, technological advance, and the growth of investment. The final chapter presents a program of public and private action to deal with the problems of cartels, as formulated by a special committee of six representatives of business, labor, government, and education.

STATE LABOR RELATIONS ACTS: A Study of Public Policy. By Charles C. Killingsworth. The University of Chicago Press, Chicago, 1948. 328 pages. \$4.00. An analysis of the policies, provisions and effects of the various state labor relations laws with a view to their restrictive and protective implications. The author also examines the experiences under many controversial state labor acts and discusses several novel types of enforcement procedures. In addition, the numerous state laws, other than labor relations acts, restricting unions and collective bargaining are summarized.

THE LIFE STORIES OF AMERICA'S 50 FOREMOST BUSINESS LEADERS. Edited by B. C. Forbes. B. C. Forbes & Sons Publishing Co., Inc., New York, 1948: 483 pages. \$5.00. The biographies of the 50 business leaders voted most outstanding in a nationwide survey by the editors of *Forbes* magazine. The many anecdotes supplementing the background data given here make highly interesting reading.

YOUR JOB: A Guide to Opportunity and Security. By Fritz Kaufmann. Harper & Brothers, New York, 1948. 238 pages. \$2.75. In addition to basic information about choosing, finding and holding a job, this book describes the conditions surrounding the job-getting of various types of special work groups—the physically handicapped, the older worker, the inexperienced candidate seeking a job for the first time, etc. Also discusses legislation affecting the worker and includes a directory of various local public agencies dealing with employment throughout the country.

PROCESS ENGINEERING. By William H. Schutt. McGraw-Hill Book Company, Inc., New York, 1948. 309 pages. \$4.00. Offers step-by-step guidance in estimating costs and setting up efficient production methods directly from blueprints. Contains detailed information on estimating labor costs, visualizing manual processes for all types of machining operations, and selecting proper material for economical production. Includes easy-to-follow demonstrations involving various types of work on power presses, lathes, drills, etc. Prerequisites for using this text: knowledge of time and motion study and of blueprint reading.

BUSINESS LETTERS THAT CLICK. Compiled by the editors and contributors of *Printers' Ink*. Funk & Wagnalls Company, New York, 1948. 380 pages. \$5.00. Techniques for increasing the effectiveness of business correspondence—sales, credit and collections, business inquiries, complaints and adjustments, and many others. Contains 325 samples of letters which have proved unusually successful.

ELEMENTS OF A STEEL COMPANY'S COMMUNITY RELATIONS PROGRAM. American Steel Institute, 350 Fifth Avenue, New York 1, N. Y., 1948. Nine booklets. Gratis. This set of booklets on improved community relations among employees, stockholders, suppliers, customers, and neighbors includes the following titles: Employee Communication; Booklet Distribution; Civic Activity; Publicity Planning; Open House Programs; Radio, Films, Television; Annual Reports; School Programs; Institutional Advertising.

HOW TO MAKE A WAGE SURVEY. By David W. Belcher and Herbert G. Heneman, Jr. *Technical Report Series, No. 2*, Industrial Relations Center, University of Minnesota, Minneapolis. 1948. 60 pages. \$1.00. Obtainable from the Professional Colleges Bookstore, University of Minnesota, Minneapolis, 14, Minn. Discusses some of the problems commonly encountered in making wage surveys and describes procedures for developing reliable wage data. Contains helpful suggestions on determining the jobs and selecting the outside firms to be included in the survey, developing job descriptions, obtaining the data, and analyzing and summarizing the results.

RECRUITING AND SELECTING SALESMEN. *Report No. 568.* The Dartnell Corporation, Chicago, 1948. 44 pages plus 26 exhibits, loose-leaf, \$7.50. Contains suggestions for using a variety of recruitment sources and discusses selection procedures for building an effective sales force. Exhibits of company forms and literature on recruitment and selection include one or more samples of the following: interviewer's rating record; trade and newspaper advertising for sales personnel; recruiting literature; application blank; weighted application blank; patterned interview guide; forms and letters for checking references; and medical examination form. Includes a breakdown of the hiring practices of 102 companies (sources of recruitment, responsibility for hiring, control forms used, etc.).

MODERN CORPORATE REPORTS—TO STOCKHOLDERS, EMPLOYEES AND THE PUBLIC. By Lillian Doris. Prentice-Hall, Inc., New York, 1948. 309 pages. \$10.00. This comprehensive study deals with such aspects of reporting as the following: public misconceptions affecting the annual report; what to cover in the annual report; reporting on production, on volume of business, on where the sales dollar went, on earnings and dividends, on financial condition, on taxes, on employment, wages, and employee relations; making financial statements understandable; making the narrative readable; livening up the annual report; and others. Illustrated.

WAGE RATES IN UNION AGREEMENTS IN EFFECT FEBRUARY 1, 1948. The Bureau of National Affairs, Washington, D. C., 1948. 650 pages. \$10.00. Presents what roughly may be labeled the wage picture at the end of the second postwar round, sketching the factual background as 1948 wage bargaining got under way. Indicates rates being paid in manufacturing and non-manufacturing industries throughout the country, as reflected in approximately 700 agreements selected from the Bureau of National Affairs' files. Findings are listed by industry, union, geographic areas, and size of community.

Practical Approaches to Industrial Peace

UNDER the over-all title of *Causes of Industrial Peace Under Collective Bargaining*, the National Planning Association is issuing a significant series of case studies of management-union relations which should be on the "must" reading list of every industrial relations executive. The first case story, devoted to the experience of Crown Zellerbach Corporation and two large unions, has just been released, and 14 more studies will follow at the rate of about one a month.

The value of a *positive approach* to industrial relations—study of the causes of peace rather than of conflict—will be demonstrated in the series. The 15 cases comprising the project were selected from thousands of nominations (made by leaders in industry, labor, and the public service, as well as by the general public) of companies and unions considered as representative of successful collective-bargaining relationships. The studies are being produced on a staggered schedule to permit adequate review and criticism, and seven are currently under way in a diversity of industries.

Already the investigators have found that "Peace in one spot does not seem like peace in another." In fact, a reasonable amount of healthy conflict is often consistent with a constructively peaceful relationship. The question, "How many strikes?" was as a rule less crucial for the findings than such questions as: "How much and what kind of freedom does the employer enjoy in his relationship with the union?" "How much mutual confidence have both parties in each other?" "Have the company, the union, the public gained or lost from the collective bargaining relationship?" Only when satisfactory answers were found to such questions could it be said that a "constructive peace" had been achieved.

The complete set of 15 case studies may be ordered for \$12.50 from National Planning Association, 800 21st Street N.W., Washington 6, D. C. Case Study No. 1 is priced at \$1.00 per copy.

• DEDICATED to "reporting the good things about our democracy," *Your Human Relations* is a new magazine which features popularly written discussions of human relations techniques in a variety of fields—e.g., industry, labor, government, education, economics, entertainment, religion, science, racial relations, international relations. A complimentary sample copy may be obtained upon request (on business letterhead) to *Your Human Relations*, 522 Fifth Avenue, New York 18, N. Y.